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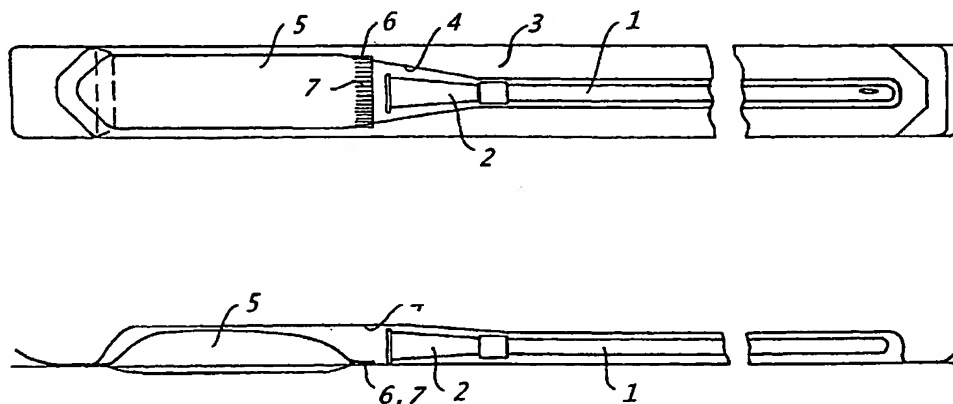
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(54) Title: A MEDICAL DEVICE HAVING A COATING COMPRISING HYDROGEN PEROXIDE AND PACKAGE THERE-  
FORE



(57) Abstract: The present invention provides an assembly for the preparation of a medical device having a porous coating comprising hydrogen peroxide. Particularly interesting medical devices are catheters (such as urinary catheters), endoscopes, laryngoscopes, tubes for feeding, tubes for drainage, guide wires, condoms, urisheaths, barrier coatings e.g. for gloves, stents and other implants, extra corporeal blood conduits, membranes e.g. for dialysis, blood filters, devices for circulatory assistance, dressings for wound care, and ostomy bags. The coating is in particular a hydrophilic coating formed from cross-linked polyvinylpyrrolidone. In one embodiment, the assembly holds a dry catheter element in one compartment of a package and an aqueous hydrogen peroxide solution in another compartment. The solution may also comprise stabilizers, e.g. chelators, and osmolality increasing agents. The catheter for insertion in the urethra is useful for the treatment, alleviation or prophylaxis of microbial infections such as urinary tract infections (UTI).

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## INTERNATIONAL SEARCH REPORT

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## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61M25/00 A61L29/12 A61L29/16 A61L29/08 A61L31/12

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61M A61L A61F C11D C08L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BIOSIS

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4 515 593 A (NORTON) 7 May 1985 (1985-05-07) column 2, line 51 - column 3, line 39 column 4, line 7 - line 59; figure 1	1-6,8,11
Y	WO 99/65538 A (OXIBIO INC.) 23 December 1999 (1999-12-23) page 5, line 21 - line 28 page 7, line 29 - page 8, line 1 page 9, line 3 - page 10, line 7 page 11, line 23 - page 13, line 13 page 44, line 16 - page 46, line 2; claims 1,2; figures 10-12	1,2

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Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
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- \*O\* document referring to an oral disclosure, use, exhibition or other means
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- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*Z\* document member of the same patent family

Date of the actual completion of the international search

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## INTERNATIONAL SEARCH REPORT

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 98/11932 A (NOESTED ULRIK ;COLOPLAST AS (DK); KAYEROED HELLE (DK); TANGHOEJ AL) 26 March 1998 (1998-03-26) cited in the application abstract page 3, line 13 - page 4, line 26; figures 7-16	1-3,6,11
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Y	page 1, line 1 - line 4 page 1, line 10 - page 2, line 16 page 8, line 19 - line 28	4-6,8,11
Y	US 6 203 536 B1 (BERG ERIC P ET AL) 20 March 2001 (2001-03-20) column 2, line 65 - column 3, line 7 column 3, line 49 - column 4, line 13 column 6, line 39 - line 63	1-6,8,11
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Form PCT/ISA/210 (continuation of second sheet) (January 2004)

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# INTERNATIONAL SEARCH REPORT

national application No.  
PCT/DK2004/000129

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 9, 10  
because they relate to subject matter not required to be searched by this Authority, namely:  
Rule 39.1(iv) PCT - Method for treatment of the human or animal body by therapy
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-6,8,11

In combination:

- a medical device having a porous polymer coating
  - a liquid
  - a hydrogen peroxide source
  - a package for said medical device
- 

2. claim: 7

The composition of an antimicrobial liquid

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**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

Continuation of Box II.1

Claims Nos.: 9,10

Rule 39.1(iv) PCT - Method for treatment of the human or animal body by therapy

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No  
PCT/UK2004/000129

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